

Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in this Application.

Listing of Claims:

Claim 1. (Previously Presented) An inflatable restraint assembly for an automotive vehicle, the apparatus comprising:

a support structure;

an air bag deployment door integrally formed in a vehicle panel, the air bag deployment door having a perimeter, at least a portion of the perimeter defined by a frangible marginal edge;

an air bag canister supported adjacent a door inner surface opposite a door outer surface, the canister including a canister opening;

an air bag supported in an air bag receptacle of the air bag canister, the air bag having an inner end operatively connected to the air bag canister and an outer end disposed adjacent the air bag deployment door, the air bag canister configured to direct air bag deployment along a deployment path through the vehicle panel;

a reaction plate disposed between the air bag and the air bag deployment door;

the reaction plate including a pivotable panel portion separate from the air bag door, and configured to pivot outward under the force of air bag inflation;

the reaction plate connected to the support structure; and

a first tubular channel disposed along at least a portion of the air bag door perimeter.

Claims 2-21. (Canceled)

Claim 22. (Previously Presented) An inflatable restraint assembly as defined in claim 1, in which the first tubular channel is disposed opposite an outer surface of the air bag door and vehicle panel.

Claim 23. (Previously Presented) An inflatable restraint assembly as defined in claim 1, further including a second tubular channel disposed adjacent and parallel to the first tubular channel, the door perimeter being disposed between the first and second tubular channels, one of the tubular channels being integrally formed with the door and the other tubular channel being integrally formed with the vehicle panel.

Claim 24. (Original) An inflatable restraint assembly as defined in claim 23 in which the frangible marginal edge is defined by an elongated gap defined by and disposed between the first and second tubular channels.

Claim 25. (Previously Presented) An inflatable restraint assembly as defined in claim 24 further including an elongated groove disposed in the door outer surface opposite the elongated gap.

Claim 26. (Original) An inflatable restraint assembly as defined in claim 1 in which the frangible marginal edge defines the entire air bag deployment door perimeter.

Claim 27. (Previously Presented) An inflatable restraint assembly as defined in claim 23 in which the frangible marginal edge and the first and second tubular channels are formed around approximately 270° of the air bag door.

Claim 28. (Previously Presented) An inflatable restraint assembly as defined in claim 1 in which a screw boss integrally extends inward from the tubular channel and is configured to receive a fastener connecting the reaction plate to the screw boss.

Claim 29. (Previously Presented) An inflatable restraint assembly as defined in claim 1 in which the tubular channel extends integrally inward from the inner surface of the door and a screw boss integrally extends inward from that tubular channel, the screw boss being configured to receive a fastener connecting the reaction plate to the screw boss.

Claim 30. (Original) An inflatable restraint assembly as defined in claim 1 in which the frangible marginal edge of the door comprises a region of reduced cross section.

Claim 31. (Original) An inflatable restraint assembly as defined in claim 1 in which the air bag deployment door includes a marginal edge that forms a hinge between the vehicle panel and the door.

Claim 32. (Original) An inflatable restraint assembly as defined in claim 1 in which a flexible skin covers at least a portion of the vehicle panel in a layered disposition.

Claim 33. (Original) An inflatable restraint assembly as defined in claim 1 in which a foam layer covers at least a portion of the vehicle panel.

Claim 34. (Original) An inflatable restraint assembly as defined in claim 31 in which:
the door and panel comprise a first material; and
the hinge includes a hinge panel comprising a second material embedded at least partially within the first material and spanning the door perimeter.

Claim 35. (Original) An inflatable restraint assembly as defined in claim 31 in which the hinge is invisible on an outer surface of the vehicle panel.

Claim 36. (Previously Presented) An inflatable restraint assembly as defined in claim 34 in which the hinge panel includes:

a first end embedded in a portion of the first material that forms the door;
a second end embedded in a portion of the first material that forms the vehicle panel; and
a mid portion disposed between the first and second ends, the mid portion having an outer surface thereof covered with a portion of the first material that forms the outer surface of the air bag door and vehicle panel, the mid portion having an exposed inner surface disposed opposite the outer surface thereof.

Claim 37. (Previously Presented) An inflatable restraint assembly as defined in claim 34 in which the second material is selected from the group consisting of thermoplastic rubber, glass matte, fabric and metal.

Claim 38. (Original) An inflatable restraint assembly as defined in claim 1 in which:
the perimeter of the air bag door is generally shaped to approximate the shape of the air bag canister opening; and
the frangible marginal edge at least partially defines an arcuate shape for the air bag door.

Claim 39. (Original) An inflatable restraint assembly as defined in claim 38 in which the air bag canister opening has the same general arcuate shape as the air bag door.

Claims 40-41. (Canceled)

Claim 42. (Previously Presented) An inflatable restraint assembly for an automotive vehicle, the apparatus comprising:

a support structure;
an air bag deployment door integrally formed in a vehicle panel, the air bag deployment door having a perimeter, at least a portion of the perimeter defined by a frangible marginal edge;
an air bag dispenser supported adjacent a door inner surface opposite a door outer surface;

an air bag supported in an air bag receptacle of the air bag dispenser, the air bag having an inner end operatively connected to the air bag dispenser and an outer end disposed adjacent the air bag deployment door, the air bag dispenser configured to direct air bag deployment along a deployment path through the vehicle panel;

a reaction plate disposed between the air bag and the air bag deployment door;

the reaction plate including a pivotable panel portion configured to pivot outward under the force of air bag inflation;

the reaction plate connected to the support structure; and

at least one rib extending integrally inward from the door inner surface towards the reaction plate.

Claims 43-47. (Canceled)